# The McGraw-Hill Companies 2001 Symposium

"Federal Role in Evolving Energy Markets"

Remarks by William L. Massey, Commissioner Federal Energy Regulatory Commission

Washington, D.C. May 23, 2001

#### Introduction

Good afternoon. I am delighted to address this excellent symposium. Economic forces and technical innovation are presenting exciting challenges in all areas of business. This is especially true with the our energy sector. Energy is the life blood of commerce, and problems in it will reverberate through, and create economic inefficiencies in the other sectors.

There are serious problems that need to be addressed in energy. And as a federal commissioner charged with regulating interstate transmission of gas and electricity, I can tell you that resolving those problems is critical to the nation's economic well being. Over the last decade, the natural gas industry under my agency's leadership has made the transition from a traditionally regulated business to one in which the gas commodity is unregulated and access to the interstate pipeline transportation system has been opened up for all buyers and sellers. Our electric industry is now in the midst of a similar transition, again led by FERC, but it has turned in to a white knuckle journey. We are experiencing what I regard as an impending, energy driven, economic disaster on the west coast and some deep concerns in other parts of the country regarding the direction of energy policy.

Last week the President recommended a comprehensive plan for addressing our energy problems. While I may not agree with every aspect of that plan, I commend the President for putting a comprehensive plan on the table. It will focus the debate on energy policy in a way that has not occurred in years. This debate is healthy and necessary, and I welcome it.

In general, the President's plan commits the federal government to opening more land, some of it in pristine areas, to oil and gas exploration, cutting red tape, and developing new infrastructure facilities like refineries, pipelines, and electricity transmission lines; he promotes electricity generation from coal and nuclear fuels, and proposes incentives for developing renewable energy resources and new technologies like fuel cells. As you are probably aware, there are strong concerns that all of this increased drilling and infrastructure will foul the environment. Environmentalists want to rebalance the plan to emphasize more conservation. And a number of policymakers from both parties want the President to champion price relief out west. You may know that runaway energy prices are wreaking havoc in the western states. Industries are literally shutting down because they can't pay exorbitant electricity prices.

Setting out a detailed summary and analysis of the President's plan is beyond what I could hope to do here this afternoon. Rather, I will discuss what a national energy strategy means to the policy goals of the FERC. I would like to explore how market approaches to our energy future are consistent with a national strategy. But to make it work will require that policy makers and regulators face up to some very tough choices.

There are a number of elements that define a solid national energy strategy with respect to natural gas and electricity. Today, I would like to discuss four: First, an adequate supply of the energy commodity; second, a well organized, efficient and non-discriminatory transportation system; third, a good market structure; and fourth, a willingness and tough mindedness on the part of regulators to ensure that the markets are performing adequately, and to step in to guarantee that consumer prices are just and reasonable. Rigorous attention to these components will serve consumers, producers, marketers, and transporters of energy.

# **Supply**

Let me first discuss the issue of supply. A good deal of the President's plan is devoted to increasing fuel supplies and the number of electricity generating facilities. Clearly, we need more supply now. Recent events in both natural gas and electricity markets are causing concern about the adequacy of natural gas supply and electric generation. Gas prices have been high and volatile, and out west the electricity crisis is now beginning its second year, with no end in sight.

High and volatile gas prices have led to calls for the commission to re-examine its policies. Complaints are pending at FERC, asking us to cap prices, and asking us to ensure that pipeline capacity is sold at no higher than regulated rates. Market participants are asking: when will supply and demand reach equilibrium at a reasonable price? Why

is the delivered price of natural gas, particularly into California, so high? Is this the way the market is supposed to work? My agency is addressing these problems.

With respect to electricity, there are concerns regarding supply adequacy in different parts of the country. Demand could outstrip supply in New York City this summer, causing sharp price spikes. And there is an absolute shortage of power plant capacity out west that threatens market chaos for this summer. Both California and the Northwestern states have built very few power plants in the last decade. It's not clear why this was so in the Northwest, but there were two key reasons for the shortfall in California. One was the political uncertainty about market structure while the state's ambitious deregulation program was subjected to a 1997 voter initiative that could have stopped it. And the other reason is the difficult and lengthy siting process new generation must negotiate. The not in my back yard phenomenon is alive and well. Clearly generation shortages have played a key role in the astronomically high prices into California wholesale markets, often 10-15 times the prices of just a year ago.

The FERC and other federal agencies have very limited jurisdiction over bringing new electric generation on line. Other than new hydroelectric projects, siting of power plants is in state hands. Clearly, it's time for states to re-examine their siting processes to ensure that they facilitate the timely building of electric supply. A siting process that poses unnecessary barriers to the entry of new generation resources will keep prices high, and is not in the public interest.

My agency does, however, have jurisdiction over interconnecting independent generators to the transmission grid. By interconnecting, I mean hooking up power plants to the transmission grid so that they can sell their power. We encourage utilities to file fair interconnection procedures and agreements, but we must go farther. We must insist upon nationwide, standardized interconnection procedures that would be universally applicable. This is just as important as getting the generation sited. And this is a particularly acute problem for so-called distributed generation such as fuel cells, which face myriad and conflicting state policies and procedures and divergent technical standards that make interconnection an unnecessary hassle. Interconnection legerdemain is a serious problem. A national energy strategy should move aggressively in this area of standardization and streamlining the procedures for hooking up power plants, but the President's plan does not do so. Fortunately, a bipartisan group of senators and representatives has introduced legislation to make this a reality.

I commend the President for focusing the nation's attention on the issue of energy supply. Yes, we must produce more natural gas and install more power plants. Yes, we must vigorously promote renewable projects that, for example, turn municipal garbage

into electricity. And yes, we must have a reasonable policy regarding the use of coal and nuclear energy in producing electricity. I welcome the ensuing debate.

I would also urge Congress to focus the debate on conservation. Conservation is not the sole answer by any stretch, but it is a critical piece of the energy mosaic. A unit of energy not consumed, is energy that need not be drilled for, dug up, sited, transported, or delivered. There is no pollution associated with conservation. Yes, we need more megawatts, but we also need to promote so called negawatts, meaning electricity not consumed. I would urge Congress to appropriately balance supply initiatives with conservation initiatives.

### **Transportation Network**

Now let me discuss the <u>delivery</u> of energy supply. Gas and electricity must be delivered over an adequate, efficient, non-discriminatory network. I have much greater confidence in the interstate gas delivery network right now than I do in the electricity network. The gas network has done a much better job keeping pace with the needs of the market. In the last six years, 10,000 miles of new pipe has been certificated by FERC. Do we need more pipeline capacity? Yes in some areas, but generally expansion has kept pace. The President's plan calls for construction of a gas pipeline to deliver Alaskan gas from Prudhoe Bay to the lower 48 states and calls for FERC to do what it can to expedite licensing new gas pipelines. I strongly agree with the President on these ideas.

Unfortunately, the interstate delivery system for electricity has not kept pace with the needs of the market. The high voltage transmission grid is the interstate highway system for electricity commerce. It is critical for keeping the lights on and for delivering cheaper power. However, it is well known that very little new transmission has been built over the last decade and current plans will not keep pace with electricity demand. The President's report says that electricity demand will increase 25% over the next ten years but transmission capacity will increase by a scant 4%. Not only does the grid have to keep up with increasing loads, but it must accommodate the new ways it is being used as a result of deregulation. Most of our grid was designed to move power from generating plants to nearby load centers. With competition and the flourishing of electricity commodity markets, the grid must handle long distance trades and other types of flows for which it was not designed. As a result, the grid is becoming congested, and delivery bottlenecks are keeping the cheaper electricity from the broader market.

Experts point to two impediments to new transmission investment. One is inadequate compensation. This is in part FERC's domain. The President's plan would encourage us to consider incentive type rates for new transmission, and the Commission

has indeed been considering such rate treatments. We must ensure that the returns on transmission investment are reasonable and sufficient to attract necessary investment.

The other impediment to new grid facilities is that it is extraordinarily difficult to get new transmission sited. This is because siting authority is dispersed among numerous state and local jurisdictions, each with its own set of rules, and each subject to strong local NIMBY pressure. This patchwork of local siting authority has effectively thwarted the building of transmission facilities necessary for interstate commerce. When the Federal Power Act was passed in 1935, the commerce carried over transmission lines was mostly local, and thus siting was allowed to stay at the local level. But now electricity commerce is regional and interstate in nature. Transmission siting authority should respect that fact. I am happy to say that the President's plan proposes to transfer siting to the federal level just as it is for interstate gas pipelines. This will not be popular with state officials, but we must find an effective way to break the logjam in siting at the state level. I urge Congress to address this matter.

In addition to the lack of new facilities, large portions of our existing transmission grid are not operated fairly or efficiently. There are constant allegations of market power and discriminatory conduct against grid operators that still have merchant interests to protect. And the operation and planning of the grid is fractured among many individual company operators. As a result, markets are unnecessarily limited in scope and planning is not done regionally. This is not conducive to an adequate reliable supply of energy or to reasonable consumer prices.

The Commission's core strategy for addressing these grid inadequacies is to transfer the planning and operation of the grid to independent regional grid operators. I firmly believe that independent operators are absolutely essential for the smooth functioning of electricity markets. Independent grid operators will ensure access to regional power markets, improve transmission pricing, regional planning, congestion management, and produce consistent market rules across a region. We know for a fact that resources will trade into the market that is most favorable to them. Trade should be based on true economics, not the idiosyncracies of differing market rules across the region.

At the end of 1999, the Commission set standards for independent regional grid operators and set up a program for the industry to transfer control to such operators. The Commission is now assessing and acting on proposals that we received last fall. Our goal is to have an independent regional grid operator functioning in every region of the country by December of this year.

This provides an excellent secquay into the issue of market structure.

#### **Market Structure**

We must insist on a good market structure that will produce just and reasonable prices. A well functioning wholesale market is needed for a well functioning retail market. Retail prices will suffer if the wholesale market is not characterized by competition and rational grid operation. And wholesale prices cannot be disciplined without adequate facilities sited by state and local officials, and without substantial numbers of retail customers seeing accurate market price signals and having the ability to react to them. The difficulty is that the FERC has jurisdiction over wholesale gas and electricity markets and the various state public utilities commissions have jurisdiction over the retail markets. This relationship means the Commission and the states must work together to achieve common goals.

Over the last year or so, we have learned quite a bit about what works and what doesn't in terms of market structure and design. For example, the California electricity market was defined by an over reliance on the volatile spot market. Spot markets and real time markets are almost by nature volatile. While the spot market is the appropriate venue to secure limited portions of needed supply, it should not be relied upon for most or all of the supply portfolio. Imagine the chaos and high prices if the market for airline tickets was limited to purchasing your ticket at the gate. Substantial reliance on purchasing in advance and using other hedging instruments is a key element of good market structure. The Commission must insist that this element is in place.

Markets also need demand responsiveness to price. This is a standard means of moderating prices, but it is generally absent from electricity markets. When prices for other commodities get high, consumers can usually respond by buying less, thereby acting as a brake on price run-ups. If the price for cabbage spikes to \$50 per head, consumers simply don't purchase, and the price drops. Without the ability of end use consumers of electricity to respond to price, there is virtually no limit on the price suppliers can fetch in shortage conditions. Consumers see the exorbitant bill only after the fact. This does not make for a well functioning market.

Instilling demand responsiveness into electricity markets requires two conditions: customers must be able to see prices before they consume, and they must have reasonable means to adjust their consumption pattern in response to those prices. Accomplishing both of these on a widespread scale will require technical innovation. A modest demand response, however, can make a significant difference in moderating price.

Of course, allowing consumers to see more accurate electricity prices will also improve energy efficiency by allowing consumers to better see the resource consequences of their consumption decisions. This was the primary motivation behind the pricing and

demand response programs of the 1970s and 80s and is equally important now. Good resource decisions are always important. The need for accurate pricing to act as a break on market power was not on the radar screen in years past because we still lived in a monopoly world. But that is what is driving the renewed interest in demand response now.

Another element of good market structure is a before the fact assurance of adequate generating capacity. The California market design called for no reserve requirement. Presumably, it was expected that the invisible hand of the market would ensure that power plants would show up when needed. Yet, given that electricity cannot be stored, relying solely on market signals for capacity commitments could mean significant fluctuations of price and power availability as supply and demand adjust. The fundamental role that electricity plays in the social, economic, health and public safety fabric of our society, however, argues that sharp fluctuations in availability and price should be minimized. One way of guarding against these fluctuations would be to include a requirement for adequate generating reserves in the market design.

Now let me turn to my fourth point.

## **Regulatory Intervention**

Even with our best efforts to put in place well structured electricity markets, there may be times when those markets fail to do their job. When markets fail, the Commission must be aggressive in stepping in. We are the cop on the beat. Ensuring that markets are working must be a part of our energy strategy. Moreover, if the states cannot depend on the wholesale market regulator to ensure reasonable prices for consumers, then states will surely think twice before heading down the restructuring path that leads to their utilities purchasing electricity in the wholesale market. And, most importantly, ensuring just and reasonable prices is the FERC's mandate under federal law.

The task of ensuring reasonable prices in wholesale markets must be addressed by FERC far differently now than under the old regime. It's much harder now. Our focus is no longer on the costs of individual companies. Instead, our focus is on markets and ensuring that they are free of market power and have the needed components to function well.

The Commission must identify and clearly define what constitutes an unacceptable exercise of market power. We need to develop clearer standards for defining prohibited market behavior. We also must ensure that markets are adequately monitored, and that

the monitoring and policing task is equipped with the right data and sufficient manpower to do the job.

And finally, the Commission must aggressively intervene when the markets are not producing reasonable prices. These new electricity markets, in particular, need a lot of attention. They are just emerging from almost a century of monopoly regulation. Moreover, the unique characteristics of electricity make the markets exceptionally vulnerable to the potential for breathtaking price run-ups when supply is short. Billions of consumer dollars are at stake. We have to be willing to impose a time out on markets that are not functioning. All of the world's most sophisticated commodity markets have time outs or circuit breaker mechanisms.

High electricity prices are rippling throughout the West causing great alarm and economic pain for citizens. The price shocks of short supply are causing serious economic dislocation and harm in the region. Factories are closing and utilities throughout the West are asking for exceptional rate increases. BPA, the dominant utility in the Northwest, may increase rates 250% to cover wholesale purchased power costs: the City of Tacoma, Washington, has voted a 50-70% increase in electricity rates for consumers.

- Aluminum industry
- Georgia Pacific Bellingham, Washington 406 jobs

Many other examples could be given.

An article in the March 13, 2001 *Wall Street Journal* reported that the current western energy crisis could cut disposable household income by \$1.7 billion and cost 43,000 jobs in Washington state alone. Some fear that it could tip the whole region into a recession. Moreover, volatile and high prices are devastating consumer and investor confidence in a market based approach to electricity regulation. If the West experiences another summer of skyrocketing power prices, it will be an economic disaster.

It is time to call a time out from this broken western electricity market. At this point, high prices that exceed production and operating costs serve no useful purpose. Is it worth dragging down an entire regional economy, or perhaps even the national economy, to protect a runaway electricity market? I say no.

Long term, there is consensus on a solution:

- More power plants

- Eliminate grid bottlenecks
- Restructure the market with long term contracts, demand responsiveness to price, and perhaps a reserve requirement
- Promote conservation

There is, however, not yet a plan for effective short term price relief. Short term price controls are necessary to restore order and reason to western markets. Without them, I fear for the health of the Western economy.

Unfortunately, the President's plan makes no recommendation for short term relief for the West this summer, and my colleagues on the Commission have failed to take forceful action to ensure reasonable prices. This is a mistake. Ensuring that markets work well, and protecting consumers when they do not, has to be part of our energy strategy. California and the West are our trial by fire.

We must work with California and Western officials to solve these problems and right the market as soon as possible.

The future of an energy policy that relies upon competitive markets hangs in the balance.

#### Conclusion

So, in summary, a sound energy policy must appropriately balance supply and conservation, must provide for an adequate and non-discriminatory delivery infrastructure, must promote a good market structure, and finally, when the market gets out of whack and is dysfunctional, regulators charged by law with ensuring reasonable prices and protecting consumers, must forcefully intervene.

Thank you.